

**To: U.S. Department of Labor, Women's Bureau**  
**From: Professor Randy Albelda, University of Massachusetts Boston and Professor Alan Clayton-Matthews, Northeastern University**  
**Re: Paid Leave Analysis Grant – Massachusetts, Final Memo**

The State-Level Paid Family and Medical Leave simulation model we developed estimates the number of family and medical leaves taken or needed in a state as well as the current employer and employee wage costs associated with those leaves. The model has the capacity to estimate the new and redistributed wage-replacement costs of any new proposed program. The simulation model relies on information collected from a survey on leave taking behavior conducted by Abt Associates for the US Department of Labor in 2012. Using this information we are able to estimate the probability of who takes a leave, what type, for how long, and based on if they receive employer pay and their own income level the use of a paid leave program. We use these probability estimates to simulate leave taking in Massachusetts using data about individuals from the American Community Survey which allows us to also estimate a host of geographic, employer, and employee characteristics about leave takers and needers. We simulate the decision to use a program versus not to use a program based on several knowable aspects that might go into this decision. These include the generosity of the program compared to employer benefits, length of leave taken, length of leave covered by the program, eligibility requirements, job protection, and individual demographics. But there are decisions to use a program that we cannot model, because these are unknown. These include ease of use, knowledge of the program, and workplace culture in the state. These later aspects will affect the take-up of the program, but we are not sure by how much.

The recent survey conducted for the US Department of Labor found an annual leave rate (percent of leaves taken per worker) of 13.1 percent in the United States and we estimate a leave rate of 13.4 percent in Massachusetts. Because people take multiple leaves in a year, we estimate that currently, in a single year, 9.6 percent of all Massachusetts workers take a leave for medical or family reasons (without a paid leave program). That is, employers and employees are already engaged in the practice of taking time off from work to tend to a serious health condition they or a relative may have or to give birth to and bond with a new child. We estimate the average length of leave is currently 6.4 weeks (32 days), with a median leave length of 3 weeks (15 days). That means that half of all leaves for any type of family and medical leave are 3 weeks or less.

In Massachusetts, using our model, we estimate that 74 percent of leave takers receive some pay from their employer for some period of their leave. The 26 percent of workers who do not receive any pay on leave are disproportionately low-wage workers. Of workers earning less than \$15.00 an hour, only 58 percent receive any employer pay for time off for a family or medical leave.

There are already significant costs borne by employers and employees of family and medical leave taking. In Massachusetts, we estimate that just over 300,000 of 3.39 million employees take 416,000 leaves (some workers take more than one leave annually) and forego \$1.33 billion in annual wages. Employers provide \$1.9 billion in wage replacement. The average cost to the worker of foregone wages for each leave he or she takes is just under \$3,000 annually while the average cost to his or her employer is close to \$4,300.

We estimate about 61 percent of current leaves in Massachusetts are for own health reasons, 15 percent are for parental leave (including maternity disability), and 24 percent of leaves are for tending to an ill relative.

We have applied our simulation model using the provisions of the paid family and medical leave program proposed in Senate bill 1008/House bill 1718 (An Act establishing a family and medical leave and temporary disability leave insurance program), sponsored by State Senator Spilka and Representative Gordon. This bill allows for 26 weeks of own health and maternity disability leave and 12 weeks for bonding with a new child and care of an ill relative. The program is restricted to all non-municipal employees that have worked for their employer for at least a full year with a minimum of 1,250 hours. The maximum weekly benefit is \$1,000 a week, and with a wage replacement rate ranging from 66 percent to 95 percent, with low-wage workers getting a larger percentage of their wage replaced. There is a one-week waiting period and job protection for up to 12 weeks of leave.

Our model estimates the number of workers that would use a paid leave program based on these parameters assuming that they behave as we predict they do, they know and understand the program, and that it is seamlessly easy to apply and receive these benefits. Clearly these are not entirely realistic assumptions, so another parameter we must impose on the model is take-up rates -- the percentages of estimated workers that would actually use a program if one existed. The simulation model already adjusts program usage for short leaves and for use of an employer benefit if it is greater than that of the program. Because the 2012 DOL survey that we base our estimates on looks at those persons already taking a leave, to some extent the national workplace culture of taking leaves is taken into account, provided the DOL sample surveyed is an accurate reflection of all leave takers and needers. In order to determine the appropriate take up rates to use, we turned to a careful examination of the number, cost, and distribution of paid leaves in New Jersey and California, the two states with the longest track records of use of both TDI and care/bonding leaves, and compared them with results from the simulation model using their program parameters. This adjustment seemed necessary for two reasons. The first is that the DOL survey, which we base our model on, has a small sample of some types of leaves and like most phone surveys had a very low response rate. This leads us to suspect that the sample may not always be representative of those that take or need leaves. By comparing the model to actual

usage in a state we can see if the survey provides an accurate account of leave taking by type of leave. The second reason is that these other state's experiences can help guide us on the unknowable factors that might lead someone to use a program. For example we do not know what percentage of people would be aware of a program or the administrative ease or difficulty associated with applying and using a program. We also have no idea how many employers might opt out of a state program in favor of their own. And while we find considerable variability in both states, they provide guideposts for selecting appropriate take-up rates. The best specification in terms of predicting cost and number of leaves, we learned, was a 50 percent take-up rate for own health leaves, an 80 percent take-up rate for leaves associated with a new child, and a 10 percent take-up rate for leaves to care for an ill relative. Using different take-up rates will produce different estimates. The ones we present here are preliminary estimates (there are still some "tweaks" to the model we plan to do) and they reflect usage of the Massachusetts program after it has been in operation for several years. These estimates do not include any administrative costs.

Using the simulation model on the proposed Massachusetts paid family and medical leave program in S1008/H1718 we estimate:

- The total number of family and medical leaves taken increases by just about 16,000 to a total of just under 472,000, a 3.6 percent increase. When we restrict leaves to only those covered by the program (all non-municipal paid employees) currently and with a program, we see a similar increase.
- Using the previously mentioned take-up rates, the total number of leaves using the proposed program will be just under 95,000, which represents 3.0 percent of all covered workers.
- The total cost of the proposed program is \$495 million (in replacement wages). Averaged across all covered employees, the annual cost is about \$160 per worker, for a weekly cost of just over \$3.00.
- The amount of covered employee wages foregone rises a bit, as more workers are taking leave. The cost of employer benefits paid directly to employees decreases by about 7 percent with the proposed program.
- The average length of leave increases by about 4 days from 6.4 weeks (based on a five-day week) to 7.2 weeks. The median length of leave increases from 3 weeks to 4 weeks.
- The average weekly program replacement wage is \$665.
- The percentage of leaves with no wage replacement falls by two percentage points from 26 percent to 24 percent. However, the percentage of unpaid leaves taken by low-wage workers falls from 42 percent to 39 percent.

The estimates presented indicate that there is already a cost borne by individual workers and employers for family and medical leaves. With a statewide program, individuals taking leave

and employers will still bear these costs, but they will be spread out more evenly across all employees and all employers. These estimates are in line with program benefits paid in other states with TDI and care leaves. Because the proposed MA program provides for fewer TDI weeks (the vast majority of leaves) than either RI or CA, the eligibility requirement of a full year of employment with the same employer is considerably stricter than that imposed in the other TDI/Family leave states. Additionally, because we assume a new program will take a long while for workers to know about and use, we expect that the numbers of leaves as a percentage of covered employees will be less than in these states.

The table below summarizes the simulator results on the new costs and benefits associated with the paid family and medical leave program proposed in S1009/H1718 in Massachusetts.

<b>Annual Total Leaves, Total Program Wage Replacement Benefits Paid and Cost Per Covered Employee in Massachusetts under S1008/H1718 PRELIMINARY RESULTS OCTOBER 2015</b>				
	New child (pregnancy disability and new child bonding)	Own health	Ill relative	Total
<b>Total leaves using wage replacement program</b>	17,217	73,984	3,682	<b>94,883</b>
<b>Total wage replacement program costs (in millions)</b>	\$68.2	\$422.5	\$4.5	<b>\$495.2</b>
<b>Annual wage replacement program cost per covered employee</b>	\$22	\$135	\$1	<b>\$158</b>

Source: Calculation using Albelda/Clayton-Matthews Family and Medical Leave Simulation Model, 2015.

Program includes one week waiting period, maximum payment of \$1000/week, 26 weeks for own health and pregnancy disability, 12 weeks for bonding with a new child and care for an ill relative, continuous employment with one's employer for at least one year with 1,250 hours of work during prior year, sliding scale wage replacement rate 66%-95% based on earnings. Covered workers include all non-municipal employees. Take-up rates used are 50 percent for own health, 80 percent for new child, and 10 percent for ill relative.